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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/643,991 | 08/20/2003 | Yoshiko Kasuga | Q91040 | 5151 |
| 23373 | 7590 | 05/03/2006 | EXAMINER | |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | BOLDEN, ELIZABETH A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1755 | |

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--------------------------------------|--|
| Office Action Summary | Application No. 10/643,991 | Applicant(s) KASUGA ET AL. | |
| | Examiner Elizabeth A. Bolden | Art Unit 1755 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
 4a) Of the above claim(s) 13-15 and 31-48 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-12 and 16-30 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☒ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/28/05 11/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election and species selection with traverse of claims 16-30 of Group II in the reply filed on 13 January 2003 is acknowledged. The traversal is on the ground(s) that the search for Group I and II is the same. The Examiner has rejoined and examined all the claims of Group I and Group II. However, the restriction of the method claims of Group III claims 13-15 and 31-48 is maintained. If the product claims are found allowable the Examiner will rejoin the depending method claims.

The requirement is still deemed proper and is therefore made FINAL.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 20 August 2002. It is noted, however, that applicant has not filed a certified copy of the Japanese 2002-238909 application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 28 October 2005 and 23 November 2005 have been considered by the examiner.

Drawings

The drawings were received on 20 August 2003. These drawings are accepted by the Examiner.

Claim Interpretation

Claims 7-9 and 19-30 define the product by how the product was made. Thus, claims 7-9 and 19-30 are product-by-process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present case, the recited steps of claims 7-9, imply a structure of a glass in any form. And in claims 19-30, the recited steps imply a structure of a glass in any form which has been precision press molded.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-9 are rendered indefinite by not clearly defining what is being claimed. It is unclear what the limitations of the claim are. The phrase "entire surface" is unclear as is the phrase "solidifying melting glass as it is". In the examination of these claims the Examiner has interpreted these claims to mean that the optical glass was formed into a precision press molding perform by solidifying molten glass in a drop form method (flow pipe).

Claims 10-12 are rendered indefinite by not clearly defining what is being claimed. It is unclear what the limitations of the claim are. The phrase "entire surface" is unclear as is the phrase "free surface".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al., US Patent 6,844,279 B2.

Hayashi et al., US Patent 6,844,279 B2 has Patent family members US 2003/0125186 A1 US 2005/0113240 A1 which are equivalent to the US Patent 6,844,279 B2. The Examiner will only use the US Patent in this rejection.

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Hayashi et al. teach an optical glass composition having overlapping ranges of components with instant claims 1-3. See abstract, column 2, lines 5-12 and 22-55, column 6, lines 45-49, and column 7, lines 12-34. Hayashi et al. teach that the optical glass has overlapping ranges of refractive index, Abbe number, visual region transparency, and T_g with instant claims 1-3. See abstract, column 2, lines 24-30, and column 8, lines 5-13. Hayashi et al. teach that the optical glass is useful in applications such as a precision press molding and as optical elements as recited in claims 4-12 and 16-30. See column 2, lines 5-12 and column 8, lines 32-65.

Hayashi et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1-12 and 15-30. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the spectral Transmittance properties recited in claim 3.

Claims 1-12 and 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehara, US Patent 6,797,659 B2.

Uehara, US Patent 6,797,659 B2 has Patent family members US 2003/0022782 A1 US 2004/0186003 A1 which are equivalent to the US Patent 6,797,659 B2. The Examiner will only use the US Patent in this rejection.

Uehara teaches an optical glass composition having overlapping ranges of components with instant claims 1-3. See abstract and column 3, lines 5-49. Uehara teaches that the optical glass has overlapping ranges of refractive index, Abbe number, and T_g with instant claims 1-3. See abstract and column 3, lines 1-20. Uehara teaches that the optical glass is useful in applications such as a precision press molding and as optical elements as recited in claims 4-12 and 16-30. See abstract and column 2, lines 52-65

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Uehara fails to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1-12 and 15-30. Uehara teaches the optical glass in terms of weight percent. However, it is believed that if the compositional ranges of components were converted from weight percent to mole percent the compositional ranges would overlap. Overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the spectral Transmittance properties recited in claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 10 am to 8:30 pm every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAB

1 May 2006



J.A. LORENGO
SUPERVISORY PATENT EXAMINER

